Biregional Meeting of the Technical Advisory Group on the Asia Pacific Strategy for Emerging Diseases

28-30 June 2016
Manila, Philippines
MEETING REPORT

BIREGIONAL MEETING OF THE
TECHNICAL ADVISORY GROUP ON THE
ASIA PACIFIC STRATEGY FOR EMERGING DISEASES

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NOTE

The views expressed in this report are those of the participants of the Biregional Meeting of the Technical Advisory Group on the Asia Pacific Strategy for Emerging Diseases and do not necessarily reflect the policies of the Organization.

This report has been prepared by the World Health Organization Regional Offices for South-East Asia and the Western Pacific for governments of Member States in the two regions and for those who participated in the Biregional Meeting of the Technical Advisory Group on the Asia Pacific Strategy for Emerging Diseases in Manila, Philippines from 28 to 30 June 2016.
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SUMMARY

The Biregional Meeting of the Technical Advisory Group (TAG) on the Asia Pacific Strategy for Emerging Diseases (APSED) was held in Manila, Philippines from 28 to 30 June 2016.

The meeting provided a forum for participants to discuss progress on the implementation of the International Health Regulations, or IHR (2005), through APSED. Examples of improved capability across the Asia Pacific region include widespread use of event-based surveillance (EBS), strengthened laboratory capacity, and many countries having established and tested emergency operations centres (EOCs).

Despite this progress, the Asia Pacific region remains vulnerable to both new and endemic disease threats as well as natural disasters. The region is certainly safer than in 2005, but the region is not yet safe.

Shared vulnerability calls for a common framework for country-level and regional actions for public health preparedness and response. Countries should draw on the findings from monitoring and evaluation activities and the experience gained in live events to continuously review and strengthen their capabilities to prepare for, detect, assess and respond to acute public health events.

An extensive review, development and consultation process over the last 12–18 months has led to the preparation of a revised framework for action – the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies, called APSED III for short. This third generation of APSED deliberately builds on the best features of the previous strategies, incorporating the lessons learnt over the last decade. Critically, APSED III will continue to serve as a pathway to IHR compliance and pandemic preparedness. It also retains a country-centred, all-hazards scope, with a step-wise approach to continuous improvement of generic core capacities.

The eight APSED III focus areas are:

1) Public health emergency preparedness
2) Surveillance, risk assessment and response
3) Laboratories
4) Zoonoses
5) Prevention through health care
6) Risk communication
7) Regional preparedness, alert and response
8) Monitoring and evaluation.

APSED III also contains some important new elements, including the explicit recognition of antimicrobial resistance (AMR) which along with preparedness of health facilities, clinical management and infection prevention and control (IPC) comprise the new Focus Area 5: Prevention through health care. Another new feature is a reference section that identifies a series of strategic global programmes and initiatives with which APSED III will interact. This includes the United Nations Sustainable Development Goals (SDGs), Universal Health Coverage (UHC) and the Global Health Security Agenda (GHSA).

Priority actions for the following 12 months were discussed, including Member States using APSED III as a framework to update national work plans for emerging infectious diseases (EIDs) and public health emergencies. Countries were encouraged to use this process to help identify and take action on priority activities, including planning for Joint External Evaluation (JEE), if not already planned or completed. The WHO regional offices for South-East Asia and the Western Pacific were advised to finalize APSED III and to support countries with its implementation. Partners were requested to provide an update of their contributions through the proposed ‘Who-What-Where’ support matrix prior to the next TAG meeting, scheduled for mid-2017.
1. INTRODUCTION

1.1 Meeting organization

The Biregional Meeting of the Technical Advisory Group on the Asia Pacific Strategy for Emerging Diseases was held in Manila, Philippines from 28 to 30 June 2016. The meeting comprised a series of presentations, panel discussions, group work sessions and plenary sessions.

Dr Haruo Watanabe, TAG member and honorary staff, National Institute of Infectious Diseases, Japan, was appointed as the Chair for the meeting. Dr Pratap Singhasivanon, TAG member and Secretary General, Southeast Asian Ministers of Education Organization, Thailand, was appointed Co-Chair. Mr Andrew Forsyth, WHO consultant, Ministry of Health, New Zealand, was appointed Rapporteur.

Refer to Annex 1 for a list of meeting participants and to Annex 2 for the programme of activities.

1.2 Objectives

The objectives of the meeting were:

1. to review emerging issues and the progress in implementing APSED (2010) including the national status of IHR (2005) core capacity requirements;

2. to review and finalize the draft updated APSED (APSED III) for consideration for endorsement by the sixty-seventh session of the WHO Regional Committee for the Western Pacific in October 2016; and

3. to recommend common priority activities until the next TAG meeting in 2017, considering the findings and updates shared during the meeting.

2. PROCEEDINGS

2.1 Opening session

Dr Takeshi Kasai, Director, Programme Management, WHO Regional Office for the Western Pacific, welcomed the Member States, TAG members, partners and other participants to the meeting. The annual TAG meeting provides a unique process to review progress, share experiences and best practices and discuss the way forward. A particular strength is that it occurs in conjunction with partners and donors and that every two years the format includes participants from both the South-East Asia and Western Pacific regions in a combined meeting.

Dr Kasai reflected on the long journey from the bitter experience of severe acute respiratory syndrome (SARS) in 2003. Dr Kasai reminded the participants that the sudden emergence, rapid spread and high levels of public and political concern over SARS helped spur Member States and WHO towards the completion of the International Health Regulations, or IHR (2005), and the development of APSED as a practical tool to guide its implementation, as well as to assist with pandemic preparedness.

Dr Kasai asked, “Are we safe?” His answer to his own question was, “Yes, but also no”. The Asia Pacific region has made major progress in strengthening IHR core capacities, which have been repeatedly tested in exercises and in real events. However, the Asia Pacific region remains a hotspot for emerging infectious diseases (EIDs), especially zoonoses. A range of significant public health threats, including antimicrobial resistance (AMR) and natural disasters, continue to challenge the region, and some health systems also remain weak. There is a clear need for further improvement.
WHO has assessed the evaluations undertaken and conducted intensive consultations with Member States, experts and partners to inform the proposals for APSED III. Dr Kasai thanked the TAG members, resource people and partners for their continued support and noted that the outcomes from this meeting will be forwarded to the South-East Asia and Western Pacific regions for consideration and adoption.

2.2 Plenary 1: Implementing IHR (2005) through APSED: taking stock after 10 years of investment

Dr Watanabe introduced the first session on progress made in implementing IHR (2005). He noted that event-based surveillance (EBS) and laboratory capacity were two APSED focus areas that had achieved significant progress in the last 10 years.

Implementing IHR (2005) through APSED: Past, present and future

Dr Li Ailan reflected on 10 years of APSED and IHR (2005) implementation. A period characterized at its outset by a degree of shock in the aftermath of SARS and continuing concern over avian influenza H5N1. We now have solid evidence of good progress in outbreak preparedness and response, but a number of challenges remain. We can be sure that the next 10 years will produce new and unexpected disease threats, as the Asia Pacific region remains a hotspot for EIDs, especially zoonoses. The Western Pacific Region alone detects 200–300 public health events each year. The IHR (2005) and APSED guide the management of these events. The investments made in ‘peacetime’, for example in EBS (now functional in 85% of Member States) and field epidemiology training programmes (FETPs), have proved their worth during subsequent events. Evaluations and real-life events have not only confirmed the achievements under APSED, including external quality assessment (EQA) in laboratories, but also identified areas where further efforts are required, for example, infection prevention and control (IPC) and risk assessment to support decision-making.

The annual TAG process gives a regular opportunity to review progress and prioritize actions for the coming year. APSED remains a valid strategy, as we can be sure that new and unexpected disease threats will continue to confront us. A challenge for the future will be to position APSED in the context of the United Nations Sustainable Development Goals (SDGs), WHO’s new Health Emergencies Programme and the 2016 IHR Review Committee recommendations, including a proposed global strategic plan and the use of Joint External Evaluation (JEE). APSED is well placed to complement these new initiatives and act as a springboard for the region to continue to use a common framework for strengthening core capacities.

Overview of public health events in the Asia Pacific region

Drs Bardan Rana and Takuya Yamagishi repeated Dr Kasai’s question, “Are we safe?” The context for any answer must recognize that the South-East Asia and Western Pacific regions continue to be vulnerable to emerging diseases and natural disasters. APSED remains a core element of ongoing preparedness activities for these threats. Influenza H7N9, H5N6 and H5N1, for example, continue to be reported in the South-East Asia and Western Pacific regions. Other public health threats include circulating vaccine-derived polio virus type 1 in the Lao People’s Democratic Republic, measles outbreak in Mongolia, Cyclone Winston in Fiji, a magnitude 7.8 earthquake in Nepal, Middle East respiratory syndrome (MERS) in Thailand, and Zika virus infections throughout the Asia Pacific region. It is clear that EIDs and other emergencies continue to put the region at risk and APSED and IHR (2005) are as important as ever to support preparedness and response activities.

Global update on IHR (2005) implementation

Dr Rajesh Sreedharan presented an update on IHR (2005) implementation. Last year, 127 of 196 states parties completed the 2015 questionnaire on IHR core capacities. Globally, following the trends from earlier years, human resources, chemical and radiological capacities remain the least developed. The development of the new IHR monitoring and evaluation framework (IHR-MEF) has been informed by aspects of the APSED approach. Dialogue, trust, mutual accountability and
transparency have been the guiding principles of IHR-MEF. In developing IHR-MEF, WHO has taken account of existing initiatives including that of Global Health Security Agenda (GHSA) and its 11 action packages. The IHR-MEF now includes four components (annual reporting, after action review [AAR], JEE and exercises). In February 2016, WHO released the JEE Tool, which prioritizes capacities for prevention, detection and response. The JEE Tool supports both IHR (2005) and GHSA, and helps to identify strengths and areas for improvement in IHR core capacities. Countries are encouraged to do AARs and exercises, both of which also reflect APSED approaches. JEEs are preceded by self-assessments, to help with ownership of the outcome of the JEE process.

**Progress on implementation since the 2015 APSED TAG meeting**

Dr Babatunde Olowokure presented progress made in APSED implementation since the 2015 TAG meeting. Each year, after assessing progress, TAG makes recommendations to WHO and Member States. IHR core capacities remain centre stage, along with financial sustainability and the testing and evaluation of preparedness and response systems. This year, we have the additional task of collectively reviewing and refining an updated strategy. Based on annual IHR self-assessments, both regions have reported continued improvements with the IHR core capacity requirements. FETPs remain a vital component of workforce development, contributing to preparedness, alert and response. The Western Pacific Region and Global Outbreak Alert and Response Network (GOARN) partners have provided support to Zika virus preparedness and response efforts, and at this time, 18 countries and areas have reported locally acquired cases. Cambodia and Viet Nam have demonstrated political and financial commitment to strengthening surveillance and response capacities. The *Western Pacific Surveillance and Response Journal* (WPSAR) reports on disease outbreaks and provides an opportunity for FETP graduates to publish AARs. Five issues have been prepared so far in 2016. National influenza centres across the two regions continue to meet annually. The WHO Regional Office for the Western Pacific conducts annual IHR exercises to test National IHR Focal Point (NFP) communication functionality, and 21 Member States participated in 2015. The WHO Regional Office for South-East Asia conducted a risk communication table-top exercise on regional preparedness for Ebola virus disease (EVD) and also conducted some country-specific exercises. Extensive consultations with Member States and expert focus groups occurred as part of the development of APSED III. Both WHO regional offices plan to finalize and adopt APSED III later this year.

**Evaluation and critical analysis of APSED (2010)**

Mr Graham Rady presented the key findings of a joint Member State, WHO and partner evaluation of almost 10 years of APSED implementation. Dr Frank Konings presented a critical analysis of APSED, highlighting progress and challenges in reaching outcomes and milestones set out in the APSED (2010) work plan. The analysis used IHR monitoring data, the findings of reviews of country work plans, and assessments against each of the eight APSED (2010) focus areas. In the Western Pacific Region, three milestones were not achieved, 37 were partially achieved and 15 were fully achieved. A full-scale post-APSED (2010) exercise was not achieved, but exercises were conducted (e.g. IHR Crystal, PanStop and Ebola simulation) and real-world events have tested the system. Evidence of strong progress was found in the areas of EBS, FETP and EQA in laboratories. The main conclusions included: 1) the APSED approach remains relevant; 2) progress has been observed across most APSED focus areas for the vast majority of Member States; 3) several capacity areas need further investment; 4) while it was too early to confidently assess sustainability, the APSED approach is promoting sustainable capacity improvements; 5) APSED has been an efficient and effective mechanism for mobilizing additional funding; and 6) recent outbreaks have demonstrated that Member States across the region remain vulnerable to EIDs.

The Chair invited questions and comments:

- **Resilient health systems are those that can cope with shocks, review the strengths and weaknesses of their performance, and revise their systems and procedures in light of the lessons learnt. In this sense, APSED III will need to provide practical guidance to countries and to donors and technical partners to support health system strengthening for IHR core capacities.**
Health system strengthening and universal health coverage (UHC) are vital elements of country-level resilience in the face of disease outbreaks and natural disasters. It was noted that the proposed APSED III explicitly recognizes the potential for synergies with global programmes.

Cross-border collaboration remains an important mechanism for collective action in both preparedness and response, for example, sharing surveillance information, risk assessments and sample testing.

APSED III will continue to emphasize the importance of ongoing and active collaboration with the animal health sector and of associated guidance documents.

How will APSED III take account of the 2016 IHR Review Committee’s recommendation for a global strategic plan?

- No draft of the proposed global strategic plan has been circulated, but one will be prepared and reviewed by all regional committees later in 2016. In the meantime, the Asia Pacific region can continue with the APSED approach, as activities supporting surveillance, risk assessment, preparedness and response, etc. are directly mandated by IHR (2005). Another feature of APSED III will be to take a pragmatic, forward-looking and flexible approach, not just in terms of public health threats but also other strategic plans that have been, or may soon be, developed.

Nine Western Pacific Region Member States sought second extensions for IHR core capacity deadlines. What progress was made by these countries?

- WHO has provided technical support to extension countries and has worked with other actors, including the G7 and donors, to mobilize resources. Twenty of the 27 Western Pacific Region Member States have now reported compliance with the IHR (2005) core capacities. It was also noted that nine South-East Asia Member States requested IHR extensions and will be reporting on progress with core capacities.

2.3 Plenary 2: Development process and overview of APSED III

The session chair, Professor Mahmudur Rahman, introduced the session.

Process of developing APSED III

Dr Rana stated that the 2015 TAG meeting was clear in its mandate to develop a successor to APSED (2010). The draft strategy is now in its near-final form. Based on evaluations and the clear views of Member States, the revised strategy deliberately builds on the strong foundations of the earlier iterations of APSED. A series of informal technical consultations on specific focus areas, a mix of face-to-face and teleconference consultations with Member States, discussions with partners, and a high-level strategy review have all helped contribute to the scope and content of the new document. The guiding objective remains the ongoing implementation of IHR (2005). New material has been incorporated to clarify the relationships and potential synergies with other strategic frameworks, including the SDGs and UHC. Member States agreed to retain the overall direction and APSED approach to building generic core capacities in a step-wise manner as key features of the revised strategy. The document will be considered and endorsed later this year.

Overview of APSED III

Dr Darren Hunt provided a summary of the draft updated strategy. He noted the desire expressed by Member States to retain a broadly similar scope, direction and structure, and highlighted a couple changes. First, ‘promotion’ of public health emergency preparedness is now the first focus area, as it is seen as fairly central and helps set the scene for the other seven. Second, while IPC has been retained, it has now been incorporated into a renamed focus area on prevention through health care, which will also include health-care facility preparedness and AMR. As before, the strategy will take a flexible approach, so as to adapt to new threats and initiatives, including global strategies.
**APSED in the Pacific**

Dr Angela Merianos discussed the delivery of core public health services in the 22 countries and areas spread across the Pacific, including Papua New Guinea, which are facing particular challenges. Small populations, geographical isolation, limited human and economic resources and high turnover of skilled staff make them vulnerable to imported disease threats. Pacific island countries and areas have collaborative frameworks, including the Healthy Islands Initiative adopted in 1995 and the Pacific Public Health Surveillance Network, which provide a sound basis for cooperative approaches to building resilient health systems. The achievement of IHR core capacities has been variable across the Pacific. However, a risk-based approach means that not all specialized capacities are as relevant for all Pacific states as they are for advanced, populous, industrial economies. Conversely, generic public health preparedness and response capacities, such as early warning and response systems including logistics, risk assessment, risk communication and information management, are equally important when responding effectively to outbreaks, other hazards and disasters, and are rightly given prominence. The expected outcome of IHR/APSED III implementation in the Pacific is that all Pacific island countries and areas will have in place the core public health capacities and capabilities necessary to detect, assess and respond to their common epidemic-prone diseases, and arrangements with regional response partners for early technical assistance and surge capacity in the event of a transnational threat or disaster.

The Chair invited questions and comments:

- **As climate change is a major contributory factor for EIDs, can climate-sensitive diseases be included in APSED III, for example under zoonoses?**
  - APSED takes a generic approach rather than itemizing specific diseases or even categories of diseases. Countries are encouraged to undertake their own strategic risk assessments to help them identify threats and prioritize planning for the future. This is one way to put the spotlight on climate-sensitive diseases.

- **Have Pacific island countries and areas identified equipment needs, stockpiles, response logistics requirements, etc. for response planning?**
  - Given their resource constraints, in broad terms many Pacific island countries and areas have quite reasonable preparedness for extreme weather events.

- **How can APSED move beyond the health system to engage with other sectors?**
  - The zoonoses focus area already prioritizes collaboration, information sharing and coordination with the animal health sector. Addressing public health emergency preparedness will necessarily involve joint planning and other collaboration with a range of government departments. Additionally, the move towards JEE will require engagement with non-health stakeholders.

- **Given Member States have only just seen the first draft of APSED III, will there be further opportunities for consultation prior to its adoption, to allow discussions with other agencies domestically?**
  - The development process is now on track for finalization and endorsement over the next few months. However, immediately following this meeting, countries may wish to quickly forward any final comments to WHO.

- **Annex 2 of the draft APSED III document identifies related programmes and initiatives. The revised strategy should help clarify the nature of the linkages, but Section 5 of the draft document needs to be better aligned to the annex.**
  - WHO noted that the eight focus areas provide a generic platform, which in combination allow for IHR implementation to link with other strategic initiatives and programmes, such as GHSA. WHO will revise the draft to ensure consistency between Section 5 and Annex 2.

- **What is the time frame for APSED III and will it be five years like its predecessors?**
  - The intention is to repeat the five-year period but to allow for flexibility so that countries can implement as their own circumstances dictate. Capacity enhancement and the maintenance of IHR core capacities will need to be sustained indefinitely, but five years is a reasonable period over which to plan, implement and assess improvements to core capacities.
The new “prevention through health care” focus area appears to be duplicative of “public health emergency preparedness” – this may dilute the importance of IPC without really adding anything new.

- WHO advised that there is no intention to detract from IPC, but rather to link it to the wider role of health-care facilities in interrupting transmission, addressing AMR and minimizing the risk of further spread through health-care-associated transmission.

Public health emergency planning needs to reflect a whole-of-government approach. This is exemplified in pandemic preparedness, which requires the resources, expertise and capabilities of multiple agencies to be deployed in a coordinated fashion.

2.4 Plenary 3: APSED III focus areas 1–3

The session chair, Dr Liu Haitao, introduced the session reviewing APSED III focus areas 1–3. During this session, progress, challenges and new elements were presented for the following focus areas: public health emergency preparedness (Focus Area 1); surveillance, risk assessment and response (Focus Area 2); and laboratories (Focus Area 3). These were then the subject of group work sessions by all participants.

Participants were invited to review the draft expected outcomes and strategic actions. They were requested to comment on any changes required and assess them as proposals for implementation.

2.5 Plenary 4: Implementing, monitoring and evaluating APSED

The session chair, Mr Rady, introduced the session, reminding participants of the direct and indirect benefits of monitoring and evaluation.

Implementing APSED III

Dr Olowokure stated that APSED III will retain a step-wise, country-centred approach, providing a generic platform for Member States to meet IHR (2005) obligations. The revised strategy will allow countries flexibility to address emerging threats and provide ‘signposts’ to help them engage with other strategic initiatives and programmes such as the SDGs, UHC and the Pandemic Influenza Preparedness Framework. There needs to be effective mechanisms at the national level to manage and coordinate APSED planning and implementation. Ongoing coordination within and between Member States, WHO and other partners will be needed for successful implementation. Member States may wish to consider establishing a mechanism, or using existing interagency structures, to lead the next phase of planning and to review progress. There are a number of regional-level mechanisms for APSED implementation. The annual TAG meeting will provide guidance on implementation of APSED III, and support strategic monitoring and evaluation activities to assist countries with priority setting and implementation. The regional committees and high-level meetings of ministers will provide endorsement and political commitment for implementation of APSED III. It is anticipated that donors and technical partners will remain engaged with APSED as they fulfil a vital role in mobilizing resources and expertise to support capacity-building. WHO will also continue to work with countries and partners to support and coordinate preparedness activities.

Monitoring and evaluation under APSED and IHR (2005)

Dr Sreedharan and Ms Sarah Hamid discussed the global monitoring and evaluation (M&E) activities as primarily guided by the core capacities specified in Annex 1 of IHR (2005). Post-Ebola urgency remains in relation to the continuing efforts to strengthen core capacities, including linkages with other initiatives, such as the G7 and bilateral collaboration between Member States, as encouraged under Article 44. Work on the new M&E framework arose from the 2014 report of the IHR Review Committee, as endorsed by the World Health Assembly (resolution WHA 68.5). The post-2016 IHR-MEF is comprised of four components: annual reporting, AAR, exercises and JEE. Key features of JEE include its voluntary, multisectoral nature and the goal of promoting transparency. The new IHR-MEF is consistent with APSED in recognizing the value of annual reporting, AARs, joint WHO–Member State evaluation, and simulation exercises, such as PanStop.
(practising rapid containment of a preliminary outbreak of influenza with pandemic potential) and the annual IHR Exercise Crystal. APSED M&E integrates both national-level and regional elements of M&E mechanisms in a flexible and cyclical process. An important and enduring feature of APSED M&E is the annual review by TAG and Member States. APSED M&E is well aligned with, and helped to inform the design of, the newly developed global IHR-MEF.

**Country experiences with JEE: Cambodia**

Dr Ly Sovann presented on Cambodia’s experience with JEE. Cambodia applied for and was granted a second two-year IHR extension. The extension and JEE provided an opportunity to develop a new national action plan for EIDs and public health emergencies, which makes full use of the APSED framework. The process began with a self-evaluation using the JEE Tool. The JEE process itself involved 11 separate working groups, each focusing on a specific area of activity. The working groups sourced and reviewed the available evidence – this in itself was a challenging but ultimately worthwhile task. Reviewing the documentation helped identify gaps, priorities for planning and relevant government resources. A new national plan for 2016–2020 was prepared. Key elements of the plan include leadership and coordination, surveillance, risk communication, AMR, IPC and point of entry (POE). The new plan sets out objectives, activities, time frames, implementation leads and resources. It also references pre-existing plans such as for laboratories. The JEE and development process led to some informal functions being strengthened by more formalized arrangements.

The process also highlighted the need for changes to legislation and the development of written standard operating procedures (SOPs). Intersectoral exercises are scheduled to test the plan, including for food safety. The planning process also proved to be an effective vehicle for engagement with donors and technical partners. The initial self-evaluation was useful in its own right and also helped to prepare for the subsequent JEE.

**Country experiences with JEE: Bangladesh**

Dr Rahman stated that GHSA was launched in February 2014 and now covers nearly 50 countries and international organizations. It is a voluntary, collaborative process involving 19 action packages and technical areas. The process begins with an initial self-assessment followed by a more thorough review. It allows countries to identify capacity gaps and objectively plan actions for improving preparedness. The framework addresses “prevent, detect and respond” components, supplemented with other supporting elements. In Bangladesh, 25 institutions and organizations were involved in the evaluation process, including visits to human and animal health laboratories and human health facilities. Priority areas included coordination within and between different sectors/agencies, legislation, funding and zoonoses. A key lesson was the need to commit to and resource the development, validation and promulgation of plans, SOPs, documentation, etc. At the conclusion of the process, the JEE core team debriefed senior health officials and policy-makers.

The Chair invited questions and comments:

- **How can we best integrate multiple frameworks such as IHR, APSED and JEE and what should be the coordinating mechanism?**
  - These frameworks are all complementary. For example, the initial self-assessment demonstrates country commitment to, and ownership of, the process. It also provides an opportunity to bring various government stakeholders together, sometimes for the first time. This process of engagement helps to put in place a coordination mechanism. It also helps to reinforce that IHR requires a whole-of-government approach and that it is not just the responsibility of the ministry of health. In broad terms, IHR, APSED and JEE are all aligned but work at different levels. The IHR sets out the core obligations of Member States, APSED provides a framework for action to implement IHR requirements, and the JEE process assists countries to assess their progress and inform decisions as how to best move forward.

- **Dr Kasai noted that JEE does not replace annual self-assessments but rather supplements them, and in so doing reinforces the process of continuous review and improvement.**
What is the relationship between APSED and GHSA?

- APSED is a 10-year-old strategy developed for the implementation of IHR (2005) in the South-East Asia and Western Pacific regions. APSED takes an all-hazards approach and has helped to inform global IHR activities such as the new JEE Tool. The GHSA is a more recent international effort that focuses on many but not all of the IHR areas (in particular it focuses on biological hazards and includes chemical and radiological risks). The GHSA also pays closer attention to some specific threats that IHR addresses only in a generic way (for example, bioterrorism). The GHSA can therefore be seen as complementary to and a subset of IHR (2005).

- APSED is more than a document or plan. It is an ongoing process, involving discussion and the sharing of experiences, challenges and lessons learnt. It is a dynamic process based on trust, mutual respect and a willingness to work collectively towards public health security.

2.6 Panel discussion: How APSED III connects with other strategies and initiatives

The panel discussion was moderated by Mr Matthew Johns, United States Department of Health and Human Services, and Dr Darren Hunt, consultant, WHO Regional Office for the Western Pacific.

The panel members were Professor Mahmudur Rahman, former Director, Institute of Epidemiology, Disease Control and Research, Bangladesh; Mr Marcus Samo, Assistant Secretary for Health, Federated States of Micronesia; and Dr Mohd Nasir Hasan, Ms Anjana Bhushan, Dr Xu Ke, WHO Regional Office for the Western Pacific.

Health system strengthening (HSS), UHC and the SDGs are all directly relevant to APSED, IHR, capacity-building and public health emergency preparedness. They address the governance of, funding for and accountability of health services. HSS is a framework for the overall architecture of health services and is the foundation for preparing and responding to health emergencies. APSED III sets out eight focus areas for capacity-building, all of which contribute to HSS, UHC and the SDGs. In combination, they strengthen health systems and support wider social and economic resilience. Countries need to carefully balance the sourcing and allocation of resources, including what funds are available domestically and what resources are provided by donors and other partners.

AMR was recognized globally in 2014 not as a future threat, but as a current one. Across the world, millions of cases and many tens of thousands of deaths annually are attributable to AMR. This carries an enormous social and economic cost, and is expected to only increase in terms of the burden of disease. This fact is recognized in APSED III as a parallel universal challenge, along with EIDs. Synergies between APSED III and actions to address AMR include the role of laboratories, collaboration between the human and animal health sectors (for example, in relation to zoonoses) and especially the need for further progress with IPC in clinical care. A One Health approach can help to underpin implementation of both APSED and the AMR global action plan.

The SDGs envisage an interconnected web of development and well-being, involving multiple sectors working at different levels. The approach taken by the SDGs goes beyond a whole-of-government model to a whole-of-society paradigm. This incorporates the roles of civil society, local government and the private sector, as well as reflecting themes such as gender equity and human rights. Implementing the SDGs will require us to think and work differently, adopting a truly long-term, collective and preventive mindset, while still focusing on concrete actions in the short term. The health sector cannot of course lead all the actions required, but in many ways can inform and influence the decisions and actions of other sectors.

Extreme weather events cause complex health and environmental effects and are expected to be exacerbated by climate change. The Pacific in particular experiences major challenges associated with cyclones, flooding, droughts and rising sea levels. Pacific island countries and areas face ongoing challenges from extreme weather events and also must prepare for and respond from a low baseline of human and economic resources. In this context, collective actions and partnerships are essential to societal and health systems resilience. In practical terms, APSED III drives countries towards
collaboration with other sectors through its all-hazards approach. Such interagency cooperation is essential in preparing for and responding to extreme weather events.

The moderators invited questions and comments:

- The section in APSED III on other global initiatives could help to simplify the conceptual framework in respect to overlaps, synergies and opportunities between the various programmes.
- Any definition of a resilient health system should address equity. This includes access to services and the safety of facilities, the infrastructure, the staff and business continuity.
- Coordination within and between sectors and other frameworks is necessary to successfully respond to public health events.
- What the participants at this meeting can ‘bring to the table’ in relation to APSED III and its connections to other initiatives is to act as champions for public health security and embed changes into institutions.

2.7 Plenary 5: Breakout session 1 - group feedback

Session moderator Dr Jeffery Cutter, TAG member, introduced the feedback from the group work on focus areas 1-3.

Focus Area 1: Public health emergency preparedness

The public health emergency preparedness focus area has been updated to reflect the move towards all-hazards plans, and to ensure that preparedness and response activities are well coordinated. The expected outcome of this focus area is to have well-functioning national plans, structures and resources in place for managing outbreaks and public health emergencies. The key elements include: 1) having clear cross-agency roles and responsibilities; 2) continuing to strengthen IHR core capacities such as NFPs and POE; and 3) increasing the use of EOCs and incident management system principles to improve the management of emergency events.

Member States were supportive of the priority issues identified in the focus area. They noted that legislation may need to be amended to support emergency responses, in addition to institutionalizing the NFP system in government structures with clear roles and responsibilities when other agencies are the lead for responses. They encouraged involving senior health officials in efforts to gain cross-sectoral commitment from other government agencies in planning for public health preparedness and response. Exercises should involve other agencies, as well as different components within the health system, to further increase intersectoral collaboration and communication. Participants mentioned the importance of strengthening capacities for surveillance and control at POE to address all potential public health threats, not just emergencies. Likewise, EOCs can also be used for preparedness, training exercises and small-scale responses. Lastly, it was noted that countries are at different stages in preparedness and response capacities, and actions should be tailored to the country context. Technical support from WHO and other partners will be needed for ongoing progress with country-level APSED plans.

Focus Area 2: Surveillance, risk assessment and response

The surveillance, risk assessment and response focus area highlights the importance of a flexible and adaptable system that uses multiple sources of information to guide risk assessments for decision-making. The involvement of health-care workers and laboratories in EBS, in addition to streamlining surveillance systems and formalizing the risk assessment function, are critical to moving this focus area forward.

There was general agreement during the meeting on the approach of Focus Area 2. It was concluded that there has been good progress made on EBS, but there is major scope for improving and systematizing risk assessment. Health-care workers and laboratories were identified as playing important roles in EBS; however, training is vital to support effectiveness and timeliness. There was a
consensus that it is paramount to ensure basic surveillance capabilities in Member States exist before Member States commence the filtering and verification of surveillance information from multiple sources, as this can be time-consuming. For an all-hazards approach to risk assessments, coordination within and between sectors was considered essential. There was a general consensus that multiple sources of data are vital for robust and balanced risk assessments but should consider resources required.

It was concluded that the FETP and modified FETP (FET) have been extremely valuable in Member States with such programmes, and that they deserve sustained funding and commitment to support graduates as well as students. There was mention that a different approach for smaller countries and areas is required, in consideration of establishing FETPs. Participants agreed that Focus Area 2 is relevant at both the national and subnational levels, but the country context needs to be considered. In addition, it was concluded that budgeting and financial planning must be aligned with and informed by surveillance and risk assessment capacity-building priorities.

Focus Area 3: Laboratories

Laboratories build on achievements of previous iterations of APSED to establish a public health laboratory system capable of rapid, accurate and safe identification of infectious and non-infectious hazards in order to contribute to health security. To ensure functioning of the laboratory system, it is essential to have laboratory fundamentals in place. These include specimen collection and transport; laboratory quality management systems (LQMS); biosafety and biosecurity programmes; functional networks; and data management for timely reporting of laboratory findings. Additional strategic actions of Focus Area 3 are linking laboratories with surveillance and risk assessment; periodic review of new technologies; assessing functionality of the laboratory system; and coordination across sectors, including laboratories for animal health and non-EID hazards.

There was overall agreement about the direction and content of this focus area, and prior demonstrable achievements for laboratories under APSED were noted. Emphasizing the need to maintain or strengthen fundamental laboratory capacities in APSED III was appreciated. Packing and shipping capacities and referral across national and international levels remain important. However, this remains a challenge for remote communities. EQA at global, regional and national levels was recognized as an important measure for diagnostic test proficiency; however, it should be placed in the context of a broader LQMS. It was emphasized that in order to take an all-hazards approach, understanding of the capabilities of different laboratories and use of pre-agreed, functional and timely communication channels are needed, as indicated in APSED III Focus Area 3. In order to maintain a functional laboratory system, sustained investments in both infrastructure and staff are required.

2.8 Plenary 6: APSED III focus areas 4–8

The session chair, Dr Kevin Russell, TAG member, introduced the preparations for the breakout session on focus areas 4–8. As with the previous session, progress, challenges and new elements were presented for the following focus areas: Zoonoses (Focus Area 4); Prevention through health care (Focus Area 5); Risk communication (Focus Area 6); Regional preparedness, alert and response (Focus Area 7); and Monitoring and evaluation (Focus Area 8).

Participants were again invited to review the draft expected outcomes and strategic actions, to provide comments and assess them as proposals for implementation. By the end of the second group work session, all participants had reviewed all eight focus areas.
2.9 Plenary 7: Breakout session 2 and Partners’ forum feedback

The session chair, Dr Pratap Singhasivanon, TAG member, introduced the feedback session.

Focus Area 4: Zoonoses

Zoonoses are highly prevalent in the Asia Pacific region due to the complex social, cultural and economic interactions between human and animal populations and the environment. Therefore, taking a multisectoral approach involving the human, animal and environmental sectors is essential to prevent and control zoonoses and the spread of AMR. The expected outcome of this focus area is that Member States adopt a multisectoral, multistakeholder approach to manage zoonotic diseases, mainly through (1) sharing of surveillance information with all relevant stakeholders; (2) coordinated response; (3) risk reduction; and (4) collaborative research.

During the breakout session, participants were glad to see that zoonoses remained as a separate focus area in APSED III and were in general agreement about this focus area. The participants indicated that there are opportunities for joint activities between the human and animal health sectors, such as training (e.g. FETP), surveillance, risk assessment, response, risk communication, and promotion of IPC and exercises. While joint opportunities are encouraged, participants recognized that this would not always be easy to achieve. However, the FETP was identified as a key achievement that should continue to be developed, for example using a One Health approach to shared learning between human and animal health students – the same students who will later need to collaborate in surveillance and response activities.

Focus Area 5: Prevention through health care

Prevention through health care is a repackaged focus area that concentrates on prevention within the health-care setting. The key elements of this focus area emphasize the importance of health-care system readiness in order to strengthen system preparedness and response by ensuring relevant infrastructure, safe hospital guidelines and policies are in place, and that facilities have the ability to identify, report, and manage EIDs and AMR.

Overall, there was general consensus and support about this focus area. Member States noted that health systems are not just for clinical management and prevention, but also for response containment to reduce the risk and mitigate the impact of outbreaks and public health emergencies. They also emphasized the importance of training front-line health-care workers on IPC practices and how to control AMR. This is especially applicable to large-scale hospitals, but also to community-level health-care facilities including those in public health sectors. There is a need to recognize and consider incentives for the additional risk faced by front-line health-care workers during events or emergencies, as well as strengthen IPC practices in between events.

Focus Area 6: Risk communication

Risk communication is a critical function of governments to help individuals and communities prepare for, respond to and recover from health emergencies. It entails putting in place a system with basic risk communication capacities that is managed by trained risk communication officers. The system integrates risk perception assessment into the risk communication strategies, uses traditional and new media and conducts routine evaluation of risk communication effectiveness.

Member States affirmed the value of risk communication in all phases of public health emergencies and the need to strengthen links between risk assessment and risk communication. There was a general consensus on the proposed components, with emphasis on developing interactive risk-communication approaches including the use of new media and community-engagement approaches that reach all members of the population, especially the most vulnerable. The capacity to identify and rapidly address misinformation or community concerns in risk communication was also cited as important. High-level advocacy for risk communication also needs to be strengthened in some Member States to ensure the capacity is sustained.
Focus Area 7: Regional preparedness, alert and response

Regional preparedness, alert and response is the capacity to provide or facilitate support to Member States as needed to effectively manage and mitigate the risks and impacts associated with disease outbreaks and public health emergencies. The key elements include (1) the use of multiple sources of information for decision-making for response; (2) a hub for preparedness planning and coordinated response to public health events and emergencies, and to develop a skilled workforce through on-the-job training and learning by doing; (3) a rapid response mechanism that can be used to deploy experts and teams at short notice; and (4) an information-sharing platform that utilizes innovative technology to enhance knowledge development, exchange and transfer.

There was general agreement about the significance and aims of this focus area. Participants suggested ways the WHO regional offices could further support preparedness in Member States, for example, virtual NFP meetings, logistics support and skilled workforce development for broader expertise. To strengthen risk assessment, the regional offices could also share risk assessment protocols for all hazards, and information to help countries interpret and apply risk assessment findings. Member States are also encouraged to pool their resources, such as for supporting FETP and preparing in-country stockpiles. It was also suggested that the biggest economies in the Asia Pacific region should continue to show leadership in supporting regional preparedness and response activities.

Focus Area 8: Monitoring and evaluation

Focus Area 8 promotes learning for continuous improvement of Member State capacities. The updated focus area retains the approach of integrating national and regional M&E processes to foster partnership and transparency. Several M&E mechanisms are proposed to both quantitatively and qualitatively evaluate health system functionality. These mechanisms include annual reporting, AAR, simulation exercises, and JEE.

The proposed outcomes and actions of this focus area were received positively. The emphasis placed on learning for improvement was seen as promoting country ownership of monitoring and evaluation. It was noted that M&E involves multiple sectors and levels of government. As such, monitoring and evaluation should occur at both national and subnational levels to avoid a distorted view of national capability. M&E as a whole and JEE in particular will require cross-sectoral commitment by senior decision-makers within countries.

Partners’ forum

Twenty partners discussed the APSED III document in its entirety. They acknowledged the progress made in the region because of APSED and highlighted the greater emphasis on coordination, collaboration and monitoring and evaluation as these are vital for capacity-building, transparency and accountability. They also recognized the importance of addressing country-specific priorities, a guiding principle of APSED, as a common framework for planning and coordination. However, partners noted the need to operationalize the strategy and produce tools for implementation at national levels to better guide countries. This will be addressed through the APSED III work plan. In conclusion, the Chair acknowledged the continued interest and support of partners and welcomed their numerous and constructive contributions over many years to the framing and implementation of APSED in its various iterations.

2.10 Special session: Global and regional health events

The session chair, Dr Paul Effler, TAG member, introduced the special session by noting the diversity of the events selected.

Sri Lanka floods and landslides

Dr Philip Gould presented on Cyclone Roanu that hit Sri Lanka in May 2016. There were 403,000 people over 22 districts affected, including 88 deaths, 56 injured and 102 missing. The EOCs
of three major line agencies of the government were activated: disaster management, health and defence. International nongovernmental organizations and the United Nations Country Team responded. The United Nations Office for the Coordination of Humanitarian Affairs sent a three-member mission. WHO provided cash support within 24 hours through the Ministry of Health and offered assistance with risk assessment and response logistics. The timing of the event, occurring at the start of the monsoon, indicated that the rainfall could be prolonged. Dengue, leptospirosis and diarrhoea were all potential threats, along with psychosocial issues. Supplies provided by WHO included water quality testing kits and tents. The clean-up effort was intensive and involved both military and civilian resources. The following proved vital to the success of response: strong health system (having a dedicated emergency preparedness and response unit, EOC, response plan), strong surveillance system, financial mechanism immediately available and a functional coordination mechanism.

**Circulating vaccine-derived poliovirus in the Lao People's Democratic Republic**

Dr William Schluter discussed the polio situation in the Lao People’s Democratic Republic. There has been a 99% reduction in wild poliovirus cases since 1988, when the World Health Assembly adopted a resolution to achieve global eradication. Two of the three types of poliovirus may have already been eradicated. In 2016, to date, there have been only 17 cases of type 1 poliovirus reported globally. Vaccine-derived virus transmission is unlikely in a highly vaccinated population, but can occur in communities with low levels of polio vaccination. Continuing wild poliovirus transmission was declared a public health emergency of international concern (PHEIC) under the IHR (2005) in May 2014. An outbreak was detected in the Lao People’s Democratic Republic in October 2015, and in the following month, circulating vaccine-derived poliovirus was declared a PHEIC. A genetic mutation rate of 3.3 % divergence suggested circulation had been ongoing for about three years. A total of 11 cases were confirmed, two of whom have died, with virus isolated from 25 asymptomatic household contacts. The Government’s response was prompt and effective. More than 8.6 million doses of vaccine were administered, and a detailed communication strategy was developed and implemented for the at-risk population. Neighbouring countries also conducted preventive and preparedness measures, including vaccination campaigns and enhanced surveillance. Two outbreak reviews have been undertaken to learn from the response.

**Multidrug-resistant tuberculosis in Papua New Guinea**

Dr Nobuyuki Nishikiori described the tuberculosis (TB) situation in Papua New Guinea. Papua New Guinea carries a high burden of TB with an incidence of 417 cases per 100 000 population – the 10th highest incidence rate globally. In addition, increasing numbers of multidrug-resistant tuberculosis (MDR-TB) cases in hotspot areas, namely Daru Island of Western Province and the National Capital District, is a cause for concern. Especially, Daru Island has been manifesting an unprecedented level of MDR-TB burden with evidence of intensive local transmission. About half of MDR-TB cases in Daru have never been treated with TB drugs, indicating the primary transmission of MDR-TB in the community. A coordinated response has been led by the Government with support from international and local partners, local health workers and engaged communities. Significant challenges, such as poor infrastructure, weak health and social systems, and government financial constraints, prevent the epidemic from being contained. More resources are urgently needed to stop the transmission in the community and to provide quality TB services for timely diagnosis and treatment.

The Chair invited questions and comments.

- Coordination is critically important on the ground among various stakeholders and key players to have effective response.
- The MDR-TB situation in Papua New Guinea poses a very serious threat to neighbouring countries and the wider Western Pacific and neighbouring South-East Asia regions. Communication and coordination in relation to this event have not always been well handled and APSED capabilities should be fully deployed as part of the response.
TB in general and MDR-TB in particular pose significant risks for front-line health-care workers. TB cases also present a risk when they travel as tourists or migrants. This calls for strong international coordination mechanisms.

Update on Zika and yellow fever in the Asia Pacific region

Dr Russell noted that Zika virus and yellow fever pose significant risks to the Asia Pacific region. In 2007, Yap in the Federated States of Micronesia experienced the Region’s first large Zika virus outbreak. Subsequently there have been outbreaks in the Pacific and cases reported across Asia. A PHEIC was declared in February 2016, based on clusters of neonatal malformations and other neurological disorders associated with Zika outbreaks. The WHO Regional Office for the Western Pacific developed a regional risk assessment and framework for action based on APSED focus areas to support the preparedness and responses of Member States.

In December 2015, a yellow fever outbreak began in Angola with spread to the Democratic Republic of the Congo and exported cases being reported in Kenya and China. This is the first time that yellow fever cases have been reported in the Asia Pacific region. Member States were reminded of the importance of yellow fever vaccination for travellers to affected areas to reduce the risk of further imported cases and spread within the region.

Zika virus, microcephaly and neurological disorders in French Polynesia

Dr Didier Musso presented the Zika virus situation in French Polynesia. French Polynesia has a population of 270,000, living on 80 inhabited islands spread over five archipelagos. Dengue has been present since the Second World War. Zika virus was first detected in 2013 and chikungunya in 2014. During the Zika virus outbreak (2013-2014), 30,000 symptomatic cases (11.5% of the population) have been reported. A retrospective serological survey suggested more than 60% of the population had been exposed. During the outbreak, a 20-fold increase in Guillain-Barré syndrome (GBS) was detected, up from the baseline average of about five cases annually. In comparison, Brazil has reported a 19% increase of GBS. This puts pressure on intensive care units. Retrospectively, 19 cases of central nervous system disorders were detected in fetuses-neonates, including eight microcephaly cases. As of July 2016, multiple Pacific island countries and areas continue to report Zika virus infections (American Samoa, Federated States of Micronesia, Fiji, Samoa,).

Global situation update on Zika

Dr Dowlen provided a global update on Zika virus. Zika virus was first identified in 1947, and has competent mosquito vectors distributed widely, particularly *Aedes aegypti*. Sixty-one countries and territories have now reported mosquito transmission, and 47 are experiencing their first outbreak since 2015. There is now a consensus that the Asian lineage of the Zika virus causes neurological disorders, which is circulating in the Americas and Cabo Verde, Africa. WHO has developed a Zika Strategic Response Plan that recognizes that further spread is likely, and concentrates on preventing the complications of infection. The main elements of the plan are detection, prevention, clinical care and support, research and coordination, but it is regularly reviewed to take account of new surveillance and research findings. Zika virus infection is set to be an enduring problem.

The Chair invited questions and comments:

- It will be informative to learn whether antibodies from the African strain of Zika provide immunity against the Asian strain. To date, we do not know.
- Are all Aedes species considered competent vectors of Zika, as some recent evidence suggests different Aedes may be variably competent for yellow fever?
  - All Aedes species are not competent vectors, and differences in competence are reported for the same species (for example, some strains of Aedes aegypti are not
competent for Zika virus, as for yellow fever virus). It has been demonstrated that Aedes albopictus is a competent vector outside the laboratory.

- It was noted that the WHO classification of countries reporting Zika cases has changed over recent months and this has the potential to cause confusion. WHO will maintain close communication with Member States to keep them informed of any changes.
- The Olympic Games in August in Brazil will provide an opportunity for tens of thousands of athletes and spectators to travel to South America, potentially being exposed to Zika infection, and then return to their own countries. WHO has carried out a risk assessment on the risks associated with the Olympic Games in Rio, and the IHR Emergency Committee for Zika concluded that given the large numbers of people who travel to and from the Americas on an ongoing basis, the risk of spread associated with the Olympics was not materially different from that at any other time. However, it is still important for any travellers or athletes visiting Rio to follow health advice, including the use of mosquito-bite-avoidance measures to minimize the risk of acquiring Zika or other arboviral infections.
- How can countries with Aedes mosquitoes but no Zika cases check their population status, given the majority of cases are asymptomatic?
  - It is important to maintain effective surveillance systems for Zika infection, including using syndromic surveillance and also other investigations, for example testing of retrospective samples. WHO has provided logistical support, including reagents to assist with laboratory surveillance.
- Counterfeit yellow fever certificates have been reported, so countries should be vigilant for such fraudulent activities.

2.11 Closing remarks

Dr Kasai congratulated the participants for the development of concise and powerful recommendations. APSED III, while retaining the proven elements of the earlier strategies, is a flexible, forward-looking document that will remain relevant in years to come. He shared a proverb with the participants – “If you want to go fast, travel alone. But if you want to go far, travel together.” This sentiment reflects the APSED approach of a shared framework for country actions for long-term, collective public health security. He also noted that the economic status of the Asia Pacific region has seen strong growth since 2005 when the first APSED was launched. This fact, combined with the common strategy gives the region resilience. However, as the participants themselves had recognized, the region remains the epicentre for many potentially significant EID threats and there is still plenty of work ahead. Dr Kasai extended his appreciation to the TAG members and partners for their advice and support, both at the meeting and over the previous year.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

1) We are constantly reminded that the Asia Pacific region is a hotspot for emerging infectious diseases (EIDs) and other public health emergencies. There is ongoing exposure to EIDs as exemplified by regular human infections with various subtypes of avian influenza. The region remains vulnerable to infectious disease threats and public health emergencies. That vulnerability is universal.

2) In the recent past, we were faced with public health events at global and regional levels. Certain risks have the potential to increase in the future. Situation updates and lessons learnt were discussed for Zika, yellow fever, vaccine-derived polio virus and multidrug-resistant tuberculosis.

3) Member States, guided by the Asia Pacific Strategy for Emerging Diseases (APSED), have made significant progress with the implementation of IHR following their adoption in 2005. Progress has also been made in implementing the 2015 Technical Advisory Group (TAG) recommendations. Many Member States have reported meeting required IHR core capacities, while others need to make further
progress. All countries must continue to sustain and improve their capacities, including at sub-national level.

4) APSED has served as a common biregional strategic framework for action to build IHR-mandated capacities for managing emerging infectious diseases and public health emergencies over the past 10 years.

5) Joint evaluation of APSED by Member States and WHO in 2015 confirmed its continued relevance. It was agreed that the APSED approach of building generic capacities, progressing in a step-wise manner, being country-centred, recognizing the importance of connectivity, working collectively with partners, and investing between outbreaks and emergencies, allows for a flexible system to manage emerging infectious diseases and public health emergencies.

6) There has been considerable progress under APSED. For example, more than 85% of Member States in both regions reported the ability to deploy multidisciplinary rapid response teams within 48 hours; Field Epidemiology Training Programmes have been established in 16 Member States; 79% of Member States have a system at the national and/or sub-national level for capturing public health events from a variety of sources; and 95% of national reference laboratories have participated in external quality assessments, which have shown increasing diagnostic proficiency.

7) While solid progress has been achieved, challenges remain, such as national capacity for systematic risk assessment, infection prevention and control, and engagement of multisectoral stakeholders. Further investments in health security are needed.

8) An updated strategy is needed in order to build upon gains achieved through the previous strategy, address continuing health security threats, adapt to evolving threats and to ensure coordination in a dynamic global health security landscape.

9) The updated strategy, to be called the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies, will retain the acronym APSED and will be called APSED III.

10) In a rapidly changing global context, major shifts in the international operational environment have an impact on Member States. These shifts include recent regional and global policy initiatives, strategies and frameworks, such as the Sustainable Development Goals, Universal Health Coverage and the Global Health Security Agenda. They are driving change and require a response from a strategy that is relevant, valuable and trusted by Member States. APSED III serves as an effective tool to coordinate implementation of these various initiatives at the national level.

11) APSED III provides a flexible framework for Member States, WHO and their partners to further strengthen IHR core capacity based on country context and level of development.

12) The IHR Review Committee on the Role of the IHR (2005) in the Ebola Outbreak and Response made 12 recommendations, including several that have already been implemented under APSED. Recommendations that will have particular impact on work in the Asia Pacific region include development of a global strategic plan to improve IHR implementation, and the new IHR Monitoring and Evaluation Framework (MEF) comprising annual reporting, Joint External Evaluation (JEE), After Action Review (AAR) and exercises.

13) In response to the 2015 APSED TAG recommendations, APSED III was developed jointly by Member States, partners, experts and WHO, through an intensive, bottom-up consultative process over the past year, and presented at this meeting. Participants supported the approach taken for the development of APSED III. The evaluation and development process reconfirmed the guiding principles of APSED:

- A generic system for preparedness, alert and response
- A step-wise approach to capacity development
- Connecting surveillance and response systems (local, national and global)
The value of learning from real-world events for continuing improvement
Investment in preparedness

14) APSED III concentrates on the core elements for public health emergency preparedness and response through eight focus areas:

- Public health emergency preparedness;
- Surveillance, risk assessment and response;
- Laboratories;
- Zoonoses;
- Prevention through healthcare;
- Risk communication;
- Regional preparedness, alert and response; and
- Monitoring and evaluation

15) APSED III promotes public health emergency preparedness and response as central to the strategy. Generic capacities can be applied to all hazards, in particular emerging infectious diseases.

16) The TAG meeting participants reviewed the APSED III document and endorsed APSED III in principle. The participants concluded that APSED III will play an important role in guiding Member States, partners and WHO in future efforts to build and maintain IHR core capacities for managing emerging infectious diseases and public health emergencies.

3.2 Recommendations

Recommendations for Member States

1) Continue to work towards achieving and maintaining IHR core capacities, guided by the APSED approach.

2) Use APSED III as a framework to update national work plans for emerging infectious diseases and public health emergencies, including a financing component.

3) Start implementation of priority activities as outlined in the updated national work plans.

4) Conduct IHR/APSED monitoring and evaluation activities, such as annual multisectoral review and stakeholder planning meetings, annual reporting, after action reviews, exercises and periodic joint external evaluations (JEE).

5) Monitor the situation for EIDs, such as Zika, yellow fever and antimicrobial resistant organisms (AMR), including multidrug-resistant tuberculosis (MDR TB); and act accordingly in line with the APSED approach for prevention, preparedness and response.

Recommendations for WHO

1) Continue to support Member States with achieving and maintaining IHR core capacities, guided by the APSED approach, and in collaboration with partners.

2) Finalize APSED III by incorporating key suggestions and modifications provided during this meeting and submit for consideration at upcoming high-level meetings, including the 2016 session of the Regional Committee.

3) Support Member States with implementation of APSED III, giving particular attention to:

- updating their national work plans for emerging infectious diseases and public health emergencies;
o carrying out jointly agreed priority activities from the revised national plans;
o conducting APSED monitoring and evaluation activities, in particular JEE; and
o coordination for the most efficient use of resources.

4) Conduct regional surveillance, risk assessment and response as part of the global system for management of public health events.

5) Strengthen regional and international partnerships with other intergovernmental stakeholders, such as other UN agencies, the World Organization for Animal Health (OIE) and the International Air Transport Association (IATA).

6) Continue to share information and foster relationships with partners with a view to identifying synergies and leveraging capabilities.

7) Create a Who-What-Where of partner support to Member State implementation of APSED, in order to optimize the use of resources.

8) Support Member States with guidance and technical cooperation to improve prevention, preparedness and response to EIDs and other public health emergencies in the region, such as AMR including MDR TB in Papua New Guinea.

9) Develop a financing strategy for APSED III implementation, including engaging with senior decision-makers in Member States to support adequate resourcing.

**Recommendations for Partners**

1) Continue to participate in the Partners’ Forum and support Member States to achieve implementation of APSED III.

2) Provide an update of their contributions in the partner support Who-What-Where matrix prior to the next TAG meeting.
ANNEXES

Annex 1. Programme of activities

Day 1 – Tuesday, 28 June 2016

08:30 – 09:00  Registration
09:00 – 10:00  Opening session
   Welcome and opening remarks
      - Dr Takeshi Kasai, Director, Programme Management
        WHO Regional Office for the Western Pacific (WHO/WPRO)
   Introductions
   Overview of objectives and agenda
   Nomination of Chairs and Rapporteur
   Administrative announcements
   Group photo
10:00 – 10:20  Coffee break
10:20 – 12:30  Plenary 1: Implementing IHR (2005) through APSED: Taking stock after ten years of investment
      - Dr Li Ailan, WHO/WPRO
10:40 – 11:00  Overview of public health events in the Asia Pacific region
      - Dr Bardan Rana, WHO Regional Office for South-East Asia (WHO/SEARO) and
        Dr Takuya Yamagishi, WHO/WPRO
11:00 – 11:20  Global update on IHR (2005) implementation
      - Dr Rajesh Sreedharan, WHO Headquarters (WHO/HQ)
11:20 – 11:40  Progress on implementation since the 2015 APSED TAG Meeting
      - Dr Babatunde Olowokure, WHO/WPRO
11:40 – 12:00  Evaluation and critical analysis of APSED (2010)
      - Mr Graham Rady, Monitoring and Evaluation Consultant, Australia and
        Dr Frank Konings, WHO/WPRO
12:00 – 12:30  Questions and clarifications
12:30 – 13:30  Lunch break
13:30 – 15:00  Plenary 2: Development process and overview of APSED III
13:30 – 13:45  Process of developing APSED III
      - Dr Bardan Rana, WHO/SEARO
13:45 – 14:00  Overview of APSED III
      - Dr Darren Hunt, WHO/WPRO
14:00 – 14:15  Tailored approach for the Pacific island context  
    *Dr Angela Merianos, WHO South Pacific*

14:15 – 15:00  Questions and clarifications

15:00 – 15:30  Plenary 3: APSED III Focus Areas 1-3

15:00 – 15:25  Introduction to the APSED III Focus Areas 1–3

15:25 – 15:30  Introduction to Breakout session 1  
    *Dr Frank Konings, WHO/WPRO*

15:30 – 16:00  *Coffee break*

16:00 – 17:30  Breakout session 1: APSED III Focus Areas 1-3

16:00 – 17:30  Groups A-E: Focus Areas 1-3

17:45 – 19:00  *Welcome reception*

**Day 2 – Wednesday, 29 June 2016**

08:30 – 08:45  Summary of Day 1

08:45 – 10:00  Plenary 4: Implementing, monitoring and evaluating APSED

08:45 – 08:55  Implementing APSED III  
    *Dr Babatunde Olowokure, WHO/WPRO*

08:55 – 09:10  Monitoring and evaluation under APSED and IHR  
    *Dr Rajesh Sreedharan, WHO Headquarters (WHO/HQ) and Ms Sarah Hamid, WHO/WPRO*

09:10 – 09:20  Country experiences with Joint External Evaluation: Cambodia  
    *Dr Ly Sovann, Ministry of Health, Cambodia*

09:20 – 09:30  Country experiences with Joint External Evaluation: Bangladesh  
    *Professor Mahmudur Rahman, Institute of Epidemiology Disease Control and Research and National Influenza Centre, Bangladesh*

09:30 – 10:00  Questions and discussion

10:00 – 10:30  *Coffee break*

10:30 – 12:00  Panel discussion: How APSED III connects with other strategies and initiatives

  *Purpose and scope of panel discussion*
  *Mr Matthew Johns, United States Department of Health and Human Services, United States of America*  
  *Dr Darren Hunt, WHO/WPRO*
Panel members:
- Professor Mahmudur Rahman, Institute of Epidemiology Disease Control and Research and National Influenza Centre, Bangladesh
- Mr Marcus Samo, Federated States of Micronesia
- Dr Anjana Bhushan, WHO/WPRO
- Dr Xu Ke, WHO/WPRO

Facilitated discussion

12:00 – 13:00  *Lunch session (light lunch will be served)*

*Presentation: Influenza: Continued unpredictable threat*
- Dr Erica Dueger, WHO/WPRO and Dr Philip Gould, WHO/SEARO

13:00 – 14:00  Plenary 5: Breakout session 1 group feedback

13:00 – 13:50  Groups A-E: Focus Areas 1-3

13:50 – 14:00  Questions and clarifications

14:00 – 15:00  Plenary 6: APSED III Focus Areas 4-8

14:00 – 14:55  Introduction to the APSED III Focus Areas 4–8

14:55 – 15:00  Introduction to Breakout session 2
- Dr Frank Konings, WHO/WPRO

15:00 – 15:20  *Coffee break*

15:20 – 18:00  Breakout session 2: APSED III Focus Areas 4-8 and Partners’ Forum

15:20 – 18:00  Groups A-E: Focus Areas 4-8

Partners' Forum: Collective efforts towards health security in the Asia Pacific

Day 3 – Thursday, 30 June 2016

08:30 – 08:45  Summary of Day 2

08:45 – 10:00  Plenary 7: Breakout session 2 group feedback

08:45 – 09:35  Groups A-E: Focus Areas 4-8

09:35 – 09:45  Partners' Forum: Collective efforts towards health security in the Asia Pacific

09:45 – 10:00  Questions and clarifications

10:00 – 10:30  *Coffee break*

10:30 – 12:30  Special Session: Global and regional health events
10:30 – 10:45  Sri Lanka floods and landslides  
- Dr Philip Gould, WHO/SEARO

10:45 – 11:00  Circulating vaccine-derived poliovirus in the Lao People's Democratic Republic  
- Dr Walter William Schluter, WHO/WPRO

11:00 – 11:15  Multidrug-resistant tuberculosis in Papua New Guinea  
- Dr Nobuyuki Nishikiori, WHO/WPRO

11:15 – 11:30  Questions and clarifications

11:30 – 11:45  Update on Zika and yellow fever in the Asia Pacific region  
- Dr Katherine Russell, WHO/WPRO

11:45 – 12:00  Zika virus, microcephaly and neurological disorders in French Polynesia  
- Dr Didier Musso, Institut Louis Malardé, French Polynesia

12:00 – 12:15  Global situation update on Zika  
- Dr Henry Dowlen, WHO/HQ

12:15 – 12:30  Questions and clarifications

12:30 – 14:00  Lunch break

14:00 – 15:00  Plenary 8: Conclusions and recommendations

14:00 – 15:00  Conclusions and recommendations

15:00 – 15:30  Coffee break

15:30 – 17:00  Closing session
Annex 2. List of participants

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